

# CROP REVENUE COVERAGE

## HIGH RISK CLASSIFICATION PREMIUM CALCULATION WORKSHEET

USE THIS WORKSHEET ONLY WHEN STARTING WITH A FLAT RATE (75% Level) WHERE A RATE DIFFERENTIAL IS INVOLVED OR APPLICABLE IN THE CALCULATION OF THE MPCJ BASE RATE

Unit: \_\_\_\_\_ Date: \_\_\_\_\_ State: \_\_\_\_\_

County: \_\_\_\_\_ Crop: \_\_\_\_\_

TWP: \_\_\_\_\_ RGE: \_\_\_\_\_ Section: \_\_\_\_\_

Practice: \_\_\_\_\_ Type: \_\_\_\_\_

A) Approved Yield:  
(includes yield adjustments) \_\_\_\_\_

B) Coverage Level: \_\_\_\_\_

C) MPCJ Base Rate:  
(C1 x C2) (Rounding: Three decimals) \_\_\_\_\_

C1) High Risk Classification Rate: \_\_\_\_\_

C2) Rate Differential: \_\_\_\_\_

D) Base Price: \_\_\_\_\_

H) Estimated Acres: \_\_\_\_\_

I) Share: \_\_\_\_\_

K) Rate Class Option Factor: \_\_\_\_\_

L) Option Factor: \_\_\_\_\_

M) MPCJ Market Price Election \_\_\_\_\_

N) Producer Subsidy Percentage: \_\_\_\_\_  
75%=0.235      60%=0.378  
70%=0.319      55%=0.461  
65%=0.417      50%=0.550

O) High Risk Classification  
Premium Factor:  
(Refer to CRC High Risk  
Classification Rules and Formula) \_\_\_\_\_

P) CRC Enterprise Option Factor : \_\_\_\_\_  
The Option Factor "L" must always  
contain a form of the Basic Unit Discount (BUD)  
when selecting the enterprise unit option.

**PART 1 - YIELD RISK**  
Multiply (A x B x C x D) \_\_\_\_\_  
(Rounding: Two decimals)

**PART 2 - RISK PREMIUM**  
(PART 1 x H x I x K x L x O x P) \_\_\_\_\_  
(Rounding: Zero decimals\*)

**PART 3 - SUBSIDY**  
(A x B x C x M x H x I x K x L x N x P) \_\_\_\_\_  
(Rounding: Zero decimals\*)

**PART 4 - PRODUCER PAID PREMIUM**  
(PART 2 - PART 3) \_\_\_\_\_  
(Rounding: Zero decimals\*)

\* NOTE: Round to two decimals for one acre quotes

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County: \_\_\_\_\_ Crop: \_\_\_\_\_

TWP: \_\_\_\_\_ RGE: \_\_\_\_\_ Section: \_\_\_\_\_

Practice: \_\_\_\_\_ Type: \_\_\_\_\_

A) Approved Yield:  
(includes yield adjustments) \_\_\_\_\_

B) Coverage Level: \_\_\_\_\_

C) MPCJ Base Rate:  
(C1 x C2) (Rounding: Three decimals) \_\_\_\_\_

C1) High Risk Classification Rate: \_\_\_\_\_

C2) Rate Differential: \_\_\_\_\_

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(Rounding: Two decimals)

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(PART 1 x H x I x K x L x O x P) \_\_\_\_\_  
(Rounding: Zero decimals\*)

**PART 3 - SUBSIDY**  
(A x B x C x M x H x I x K x L x N x P) \_\_\_\_\_  
(Rounding: Zero decimals\*)

**PART 4 - PRODUCER PAID PREMIUM**  
(PART 2 - PART 3) \_\_\_\_\_  
(Rounding: Zero decimals\*)

\* NOTE: Round to two decimals for one acre quotes

THIS WORKSHEET IS INTENDED TO ASSIST IN ESTIMATING PRODUCER PREMIUM ONLY.

# CROP REVENUE COVERAGE

## HIGH RISK CLASSIFICATION PREMIUM FACTOR RULES AND FORMULA

Please note that the CRC High Risk Classification formula for calculating premium differs from the standard CRC formula. Also note that **NOT** all factors used in the standard CRC formula are used when calculating a CRC High Risk Classification premium.

**STEP 1:** Information needed.

Variables:		Example
(APH)->Approved Yield	=	ie. 100 bu.
(DIFF)->Rate differential factor	=	ie. 0.65
(LEV)->Selected Coverage Level	=	ie. 65% or 0.65
(HRBR)-> High Risk Classification Base Rate*	=	ie. 23.0% or 0.230
*rate represents 75% coverage level		

**STEP 2:** Apply the differential from the supplemental rate differential table.

High Risk Classification Base Rate = 23.0 % = 0.230  
Rate differential for 65% coverage (DIFF) = 0.650  
Adjusted High Risk Classification Base Rate =  $0.230 * 0.650 = 0.150$  or 15.0%  
(Rounding: Three decimals)

**STEP 3:** Cotton APH Adjustment.

Only for Cotton-021, multiply the APH by 0.1 (ie.  $1500 * 0.1 = 150$ ).

For all other eligible crops (Wheat-011, Corn-041, Soybeans-081, and Grain Sorghum-051) skip this step.

**STEP 4:** Calculate the CRC High Risk Classification Premium Factor via this formula:

CRC High Risk Classification Premium Factor =

<b>Part 1</b>	17.66170	$(-1.14398 + (-0.00473 * APH) + (1E-05 * (APH^2)) + (1.10535 * (HRBR * 100)) + (-0.00076 * ((HRBR * 100)^2)) + (0.00039 * (APH * HRBR * 100)) + (3.36066 * LEV))$
<b>Part 2</b>	-0.02571	$(0.05 - 1.13 * (HRBR - 0.083))$
<b>Part 3</b>	0.03000	Apply Cup and Cap to Part 2 (Min 0.03 , Max 0.07)
<b>Part 4</b>	1.03000	Part 3 + 1.00000
<b>Part 5</b>	18.19155	Part 1 * Part 4
<b>Part 6</b>	1.21277	Part 5 / 100 / HRBR
<b>Part 7</b>	1.213	Round Part 6 To 3 decimals.

**ANSWER = 1.213**

**STEP 5:** Use CRC Premium Calculation Worksheet High Risk Classification Formula to calculate the premium applying the CRC High Risk Classification Premium Factor from STEP 4 above.